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# ENVIRONMENTAL ASSESSMENT

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HOG ISLAND BANK PROTECTION - LOCK AND DAM 16

AND

HURON CHUTE CLOSING DAM MODIFICATION - POOL 18

JULY 1990

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DISTRIBUTION STATEMENT A

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US Army Corps  
of Engineers

Rock Island District

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DEPARTMENT OF THE ARMY  
ROCK ISLAND DISTRICT, CORPS OF ENGINEERS  
CLOCK TOWER BUILDING—P.O. BOX 2004  
ROCK ISLAND, ILLINOIS 61204-2004

ENVIRONMENTAL ASSESSMENT

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AND  
HURON CHUTE CLOSING DAM MODIFICATION - POOL 18



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JULY 1990

## ENVIRONMENTAL ASSESSMENT

### HOG ISLAND BANK PROTECTION - LOCK AND DAM 16 AND HURON CHUTE CLOSING DAM MODIFICATION - POOL 18

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Section 404(b)(1) Evaluation (40 CFR 230)  
Pertinent Correspondence  
Distribution List

## ENVIRONMENTAL ASSESSMENT

### HOG ISLAND BANK PROTECTION - LOCK AND DAM 16 AND HURON CHUTE CLOSING DAM MODIFICATION - POOL 18

#### I. PURPOSE AND NEED FOR ACTION.

The purpose of this environmental assessment is to address the effects of new construction proposed as part of navigation channel maintenance. Navigation channel maintenance includes periodic repair of existing training works or regulating structures, e.g., wing dams and closing dams, as well as modification of these structures. These actions generally involve large grade limestone rock placement.

Modification may include the raising, lowering, or notching of these structures to optimize their performance in flow control and sediment transport. Also, navigation dams and appurtenant structures require periodic rock placement for repair or improvement of bank protection.

This document specifically addresses rock placement at two sites. One site is located at Lock and Dam (L/D) 16 between Rock Island County, Illinois, and Muscatine County, Iowa. The site, referred to as Hog Island, is the location of the equipment storage yard for L/D 16. It lies between the gated portion and the overflow spillway portion of the dam, at approximately river mile (RM) 457.2. The other site is an existing notched closing dam between Huron Island and the Iowa bank at RM 425.

The lock equipment storage yard, located on the pool or upstream side of L/D 16, is threatened by continual erosion and requires placement of approximately 500 feet of rock for effective bank stabilization. Hog Island also is eroding immediately downstream of the gated portion of the dam and requires 300 feet of riprap for effective bank stabilization.

The subject closing dam reduces flow to Huron Chute, thereby maintaining flow in the navigation channel. Recent increases in the frequency and amount of dredging required between RM 419 and 425 indicate that navigation channel flows may not be adequate to transport sediment through this river reach. Engineering consideration of the Huron Chute closing dam indicates that the notch may be contributing to this problem by allowing excess flow to pass down Huron Chute instead of the navigation channel.

Alternatives to the proposed action are limited. They include the no Federal action alternative, or other configurations and quantities of rock.

The project is expected to help in maintaining the navigation channel, with no significant impacts to natural, cultural, economic, or social resources. For this reason, an Environmental Impact Statement (EIS) will not be

prepared for this action. Because the proposed action is subject to the provisions of the Clean Water Act, a Section 404(b)(1) Evaluation has been prepared for the project (see attachments). Section 401 compliance has been sought through coordination with the States of Illinois and Iowa. A joint Public Notice has been prepared and distributed concurrently with this document. Copies of correspondence relative to this action are included in Pertinent Correspondence, attached.

## II. PROJECT DESCRIPTION.

The proposed work addressed in this document involves placing bank protection and modifying a closing dam in conjunction with annual maintenance and repair of existing training works (wing dams) in Mississippi River Pools 16, 17, and 18 during the 1990 construction season. (See plates 1 through 4.)

The site of proposed riprap placement is located adjacent to L/D 16 at RM 457.2 (see plate 1). The project site is more familiarly known as Hog Island.

Bank protection of this type has been requested by various Federal and State agencies in order to reduce erosion throughout the Upper Mississippi River. These requests have been made during several interagency forums and are perceived to be of overall benefit based on erosion reduction and increases in habitat diversity.

In addition to armoring the island tip, bank protection will be extended approximately 300 feet down the east side of the island immediate to the gated portion of the dam. Up to 5,000 tons of limestone rock will be required to provide adequate bank protection at both sites. (See plate 2 for the location of these sites.)

A notched closing dam exists near the upstream end of Huron Chute. The closing dam has undergone engineering evaluation and it has been determined that the function of the structure in flow diversion would be better served by closing the notch and reducing flow in Huron Chute (see plate 3).

It is proposed to repair this structure and improve the bank protection associated with it (see plate 4). Up to 6,000 tons of rock will be required for this action. A 50-foot boat pass will remain in place of the existing 150-foot boat pass.

## III. ALTERNATIVES.

Alternatives to the proposed action include:

authorized responsibilities for maintenance of the 9-Foot Channel Navigation project. Periodic maintenance and repair of training works are necessary to maintain the integrity of the navigation channel. Further loss of the Hog Island land mass eventually could threaten the structural integrity of L/D 16.

B. Construction of Training Works in Other Locations or Configurations. This alternative was not selected based on hydraulic design necessary to capture and maintain flow in the main channel of the Mississippi River at the noted location in Pool 18, Huron Chute.

C. Repair of Structures Without Additional Bank Protection. This alternative was not selected due to the need to improve protective features. The need for bank protection is evidenced by existing levels of bank erosion and loss of storage yard area.

#### IV. AFFECTED ENVIRONMENT.

Prior to L/D 16 construction, Hog Island was approximately 2 miles long, extending between RM 456 and 458. Construction of L/D 16 bisected Hog Island, inundating the upstream section and leaving two exposed land masses on the pool side and one land mass on the tailwater side. Vegetation on the island is primarily floodplain forest comprised of species such as silver maple (Acer saccharinum), cottonwood (Populus deltoides), willow (Salix sp.), box elder (Acer negundo), and mulberry (Morus sp.).

Wildlife species typically using the area include small mammals. The combination of wooded island and adjacent slough provides habitat for reptiles and amphibians. The mature forest also provides habitat for the northern flicker and other woodpecker species, as well as nesting cavities for owls. The bald eagle is a winter resident and uses large trees on the shoreline of the island as perches. Other birds that utilize shoreline perches include the belted kingfisher and turkey vulture. Wading birds such as great blue herons utilize the slough as a feeding station.

The aquatic community found at the Hog Island erosional sites is likely to be limited. Catfish species are known to utilize cut banklines for spawning, however, these sites are of questionable stability due to erosion and would limit spawning success.

The aquatic community at and around the Huron Chute closing structure would typically be diverse, owing to the range of available habitat types within a small area. The Iowa Department of Natural Resources has highlighted the closing structure's nursery value to flathead catfish.

V. ENVIRONMENTAL EFFECTS. Environmental effects are summarized in table EA-1.

TABLE EA-1

Effects of the Proposed Action  
on Natural and Cultural Resources

| <u>Types of<br/>Resources</u>                          | <u>Authorities</u>  | <u>Measurement<br/>of Effects</u>                                   |
|--|---|---|
| Air Quality  | Clean Air Act, as amended<br>(42 U.S.C. 1657h-7, et seq.)   | No significant effect   |
| Areas of Particular Concern<br>Within the Coastal Zone | Coastal Zone Management Act<br>of 1972, as amended (16<br>U.S.C. 1451, et seq.)   | Not present in planning area  |
| Endangered and Threatened<br>Species Critical Habitat  | Endangered Species Act of 1973,<br>as amended (16 U.S.C. 1531,<br>et seq.)  | No significant impacts<br>anticipated                               |
| Fish and Wildlife                                      | Fish and Wildlife Coordination<br>Act (16 U.S.C. 661, et seq.)  | No significant effect   |
| Floodplains  | Executive Order 11988, Flood<br>Plain Management  | No significant effect   |
| Historic and Cultural<br>Properties                    | National Historic Preservation<br>Act of 1966, as amended (16<br>U.S.C. 470, et seq.)   | SHPO coordination<br>initiated                                      |
| Prime and Unique<br>Farmland                           | CEQ Memorandum of August 1, 1980;<br>Analysis of Impacts on Prime or<br>Unique Agricultural Lands in<br>Implementing the National<br>Environmental Policy Act | No significant effect   |
| Water Quality  | Clean Water Act of 1977, as<br>amended (33 U.S.C. 1251, et seq.)  | No significant effect   |
| Wetlands   | Executive Order 11990, Protec-<br>tion of Wetlands, Clean Water<br>Act of 1977, as amended (43<br>U.S.C. 1857h-7, et seq.)                                    | Present in planning area;<br>effect anticipated to be<br>negligible |
| Wild and Scenic<br>Rivers                              | Wild and Scenic Rivers Act, as<br>amended (16 U.S.C. 1271, et seq.)   | Not present in planning area  |
| Mineral<br>Resources                                   | National Environmental Policy Act<br>of 1969, P.L. 91-190, as amended   | No significant effect   |

The long-term effect of the project is expected to be beneficial to man-made resources in the area with no significant adverse effect on natural resources.

Wildlife species which may currently utilize the Hog Island project area will not be significantly affected by the action. The placement of riprap below the normal water level and extension of bank protection below the dam is expected to benefit aquatic resources by increasing substrate diversity and reducing bank caving.

Rock bank protection is not expected to affect terrestrial species currently using the project area.

Closing dam modification will reduce, but not eliminate, flow entering Huron Chute during all discharge conditions. This is expected to have minimal overall effect on the aquatic system in Huron Chute, with terrestrial effects limited to reduction of bankline erosion in Huron Chute. This structure was last modified in 1986 and 1987 during other repair work. These modifications likely resulted in the combination of depth velocity and cover conditions favorable to juvenile flathead catfish. It is expected that the fishery values will be similar to the preconstruction condition. Pre- and post-construction fish sampling will be attempted to determine fishery effects.

Reduction of side channel flow during the winter months may increase habitat suitability for fish species requiring low velocities. Increase of navigation channel flow is intended to improve sediment transport and scour of sand accretions between RM 419 and 425. Because of the relative instability of the sand substrate in this reach, little colonization or development of a diverse benthic community would be expected. Therefore, reversal of accretion in this reach is not expected to be detrimental to the aquatic community.

Federally listed threatened and endangered species were considered for this project. Threatened or endangered species which potentially may be affected by actions of this type are the bald eagle (Haliaeetus leucocephalus), the Higgins' eye pearly mussel (Lampsilis higginsii), and the fat pocketbook pearly mussel (Potamilis capax).

Bald eagles utilize large trees along the shoreline throughout the area as resting and feeding perches. Over the long term, bank stabilization should serve to prevent the loss of shoreline trees. No such trees would need to be removed for construction of the proposed project. Project construction will take place during the summer months, therefore, no significant impacts to the wintering bald eagle population are anticipated to result from project activities.

Because the bankline substrate through the Hog Island area is somewhat unstable, as evidenced by the erosional activity, it is not likely that the area supports any significant mussel fauna including either endangered



mussel species. Also, neither mussel species is known to occur at or around either work site. Therefore, the proposed project is not expected to affect the Higgins' eye or the fat pocketbook pearly mussel.

Minor, temporary impacts to noise levels and air quality due to construction activity may occur as a result of construction and transportation of materials. This may have temporary adverse effects on users of nearby recreational sites. No long-term significant impacts are anticipated, and no air quality standards should be violated.

Minor, temporary increases in turbidity and levels of suspended sediments would occur during construction activity. No long-term adverse effects to water quality are anticipated. A Section 404(b)(1) Evaluation has been prepared and is attached to this document. Section 401 certification has been requested from the State of Wisconsin and will be obtained prior to construction.

Archeological sample surveys with historic documents review and geomorphological modeling conducted for Navigation Pools 16, 17, and 18 by the Rock Island District failed to identify any previously located archeological sites or historically sensitive locations in the vicinity of the project areas. Because no ground modification is proposed, the project has no potential to affect any significant historic property. Comments from the Illinois and Iowa State Historic Preservation Officers are solicited by receipt of this document.

Construction of bank protection and the closing dam is expected to have little effect on aesthetic values. No displacement of people or farms will occur, and no change in community cohesion is anticipated. No significant impacts to community and regional growth, property values and tax revenues, or employment and labor force are expected to result from this action. Business and industrial development may be considered to benefit from maintenance of the navigation channel and training works in this section of the river. No significant impacts to life, health, and safety are anticipated. The completed project is likely to slightly increase fishing activity, and future use of the riverward portion of Hurricane Island for dredged sand disposal will attract recreational boaters. Therefore, the project is expected to slightly benefit public recreational facilities and services. No impacts to mineral resources will result from this action.

Considered in conjunction with future proposed work in the project area, cumulative effects of the project include bank stabilization, reduced dredging, and slight recreational enhancement.

With no Federal action, no adverse effects would occur from construction, bank caving and sediment input would continue, and no long-term benefits to recreation would be expected. Alternative locations for bank protection and closing dam construction would be anticipated to have impacts similar to the preferred alternative, but would not serve the immediate need for training works maintenance and bank protection.

## VI. RELATIONSHIP TO ENVIRONMENTAL REQUIREMENTS.

The project will comply with Federal environmental laws, Executive orders and policies, and State and local policies including the Clean Air Act, as amended; the Clean Water Act, as amended; the Endangered Species Act of 1973, as amended; the Federal Water Project Recreation Act; the Fish and Wildlife Coordination Act of 1958, as amended; the Land and Water Conservation Fund Act of 1966, as amended; the National Environmental Policy Act of 1969, as amended; and the National Historic Preservation Act of 1966, as amended.

The project is located on federally owned land and will not result in the conversion of farmland or existing land use plans. This segment of the Upper Mississippi River is not a federally recognized wild or scenic river. The project will not result in any significant change in floodplain storage, and no significant loss of wetlands will occur from project implementation. Therefore, this action will not conflict with the provisions of the Farmland Protection Policy Act of 1981; Executive Order 11988, Floodplain Management; Executive Order 11990, Protection of Wetlands; or the Wild and Scenic Rivers Act of 1968.

## VII. COORDINATION.

Coordination has been maintained throughout the planning and design process with the U.S. Fish and Wildlife Service (USFWS), the Illinois Department of Conservation, and the Iowa Department of Natural Resources (see Pertinent Correspondence).

Coordination with the U.S. Environmental Protection Agency and the Illinois and Iowa State Historic Preservation Officers (SHPO) is being pursued through distribution of this Environmental Assessment and solicitation of comments.

Wing and closing dam repair work, bank stabilization, and improvement of navigation training works are coordinated through an interagency team referred to as the Committee to Assess Regulatory Structures (CARS). CARS consists of interdisciplinary personnel from the Corps of Engineers and the USFWS. The USFWS ensures the input of appropriate State natural resource staff to the planning process. CARS activities also are discussed in other forums such as the Fish and Wildlife Interagency Committee (FWIC) and the River Resources Coordinating Team (RRCT).

FINDING OF NO SIGNIFICANT IMPACT

HOG ISLAND BANK PROTECTION - LOCK AND DAM 16  
AND  
HURON CHUTE CLOSING DAM MODIFICATION - POOL 18

I have reviewed the information provided by this Environmental Assessment, along with data obtained from cooperating Federal, State, and local agencies and from the interested public. Based on this review, I find that construction of the proposed bank protection and closing dam will not significantly affect the quality of the environment. Therefore, it is my determination that an Environmental Impact Statement (EIS) is not required. This determination will be reevaluated if warranted by later developments.

Alternatives considered along with the preferred action were:

- No Federal action
- Closing dam construction at original location
- Repair of wing dams with no bank protection

Factors considered in making a determination that an EIS was not required are as follows:

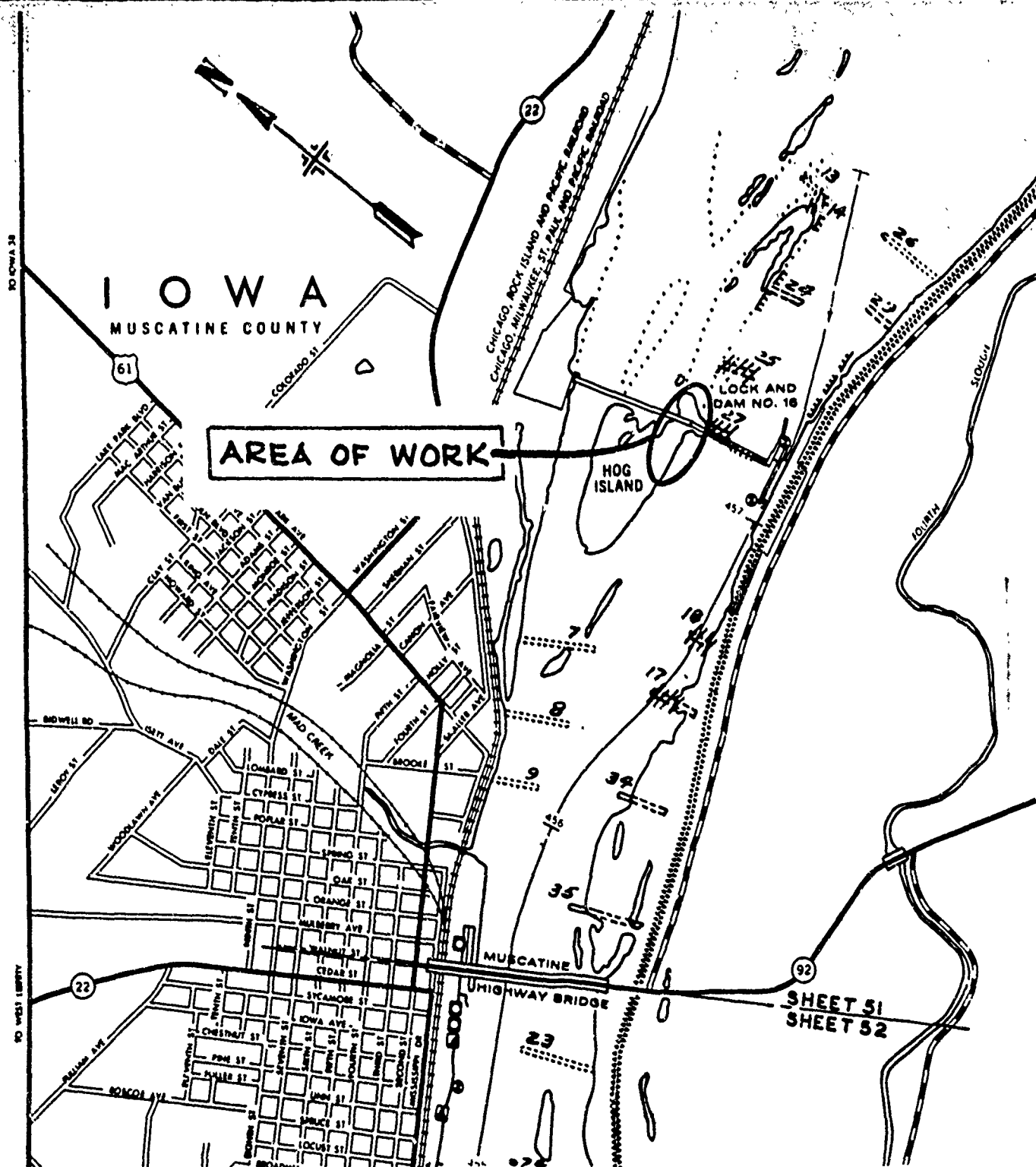
a. The action is expected to reduce the need for channel maintenance dredging and disposal activities in this section of the river.

b. Initial loss of and disturbance to aquatic habitat during construction will be offset by increased habitat diversity following project completion.

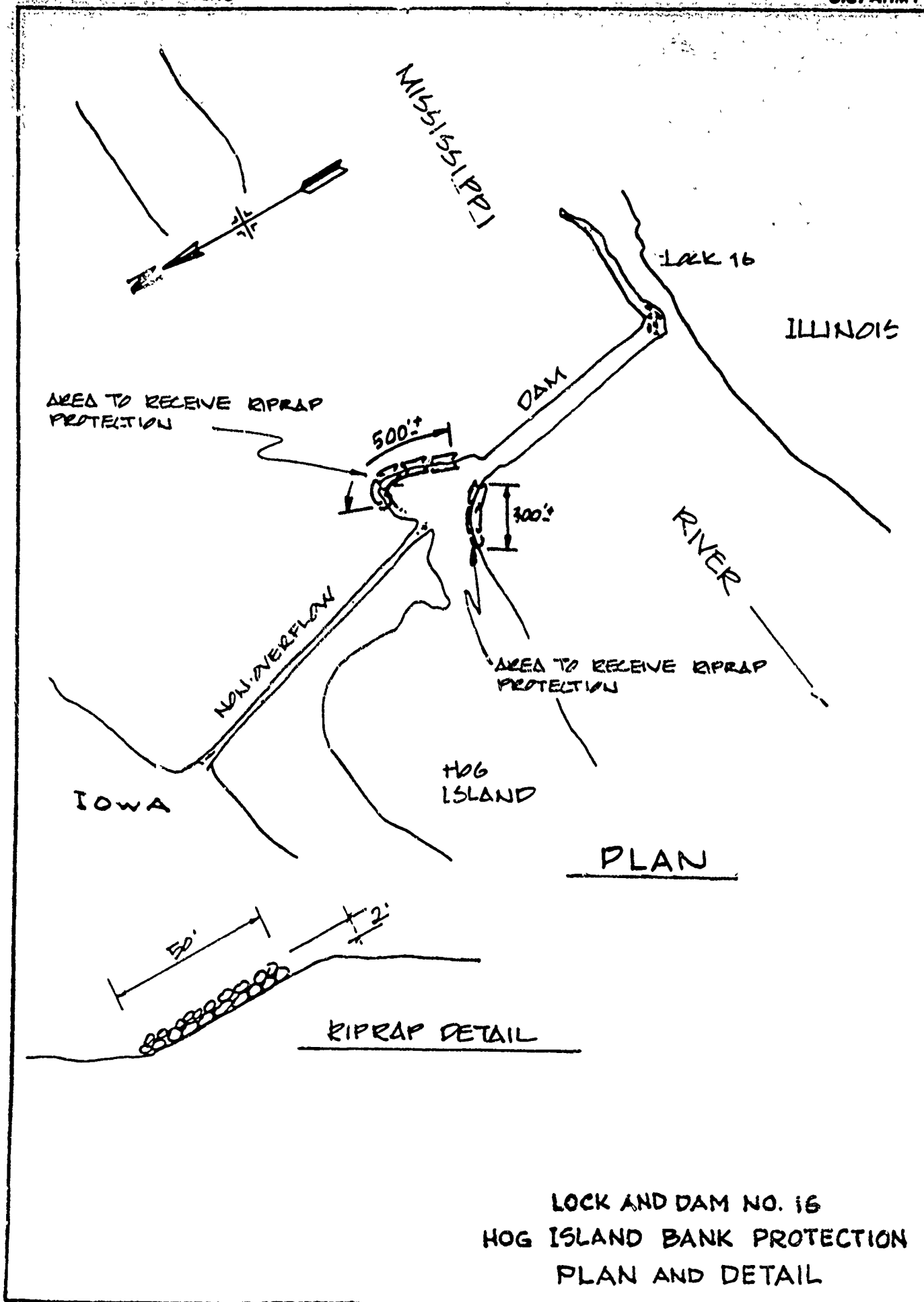
c. No significant social, economic, environmental or cultural impacts are anticipated as a result of this action.

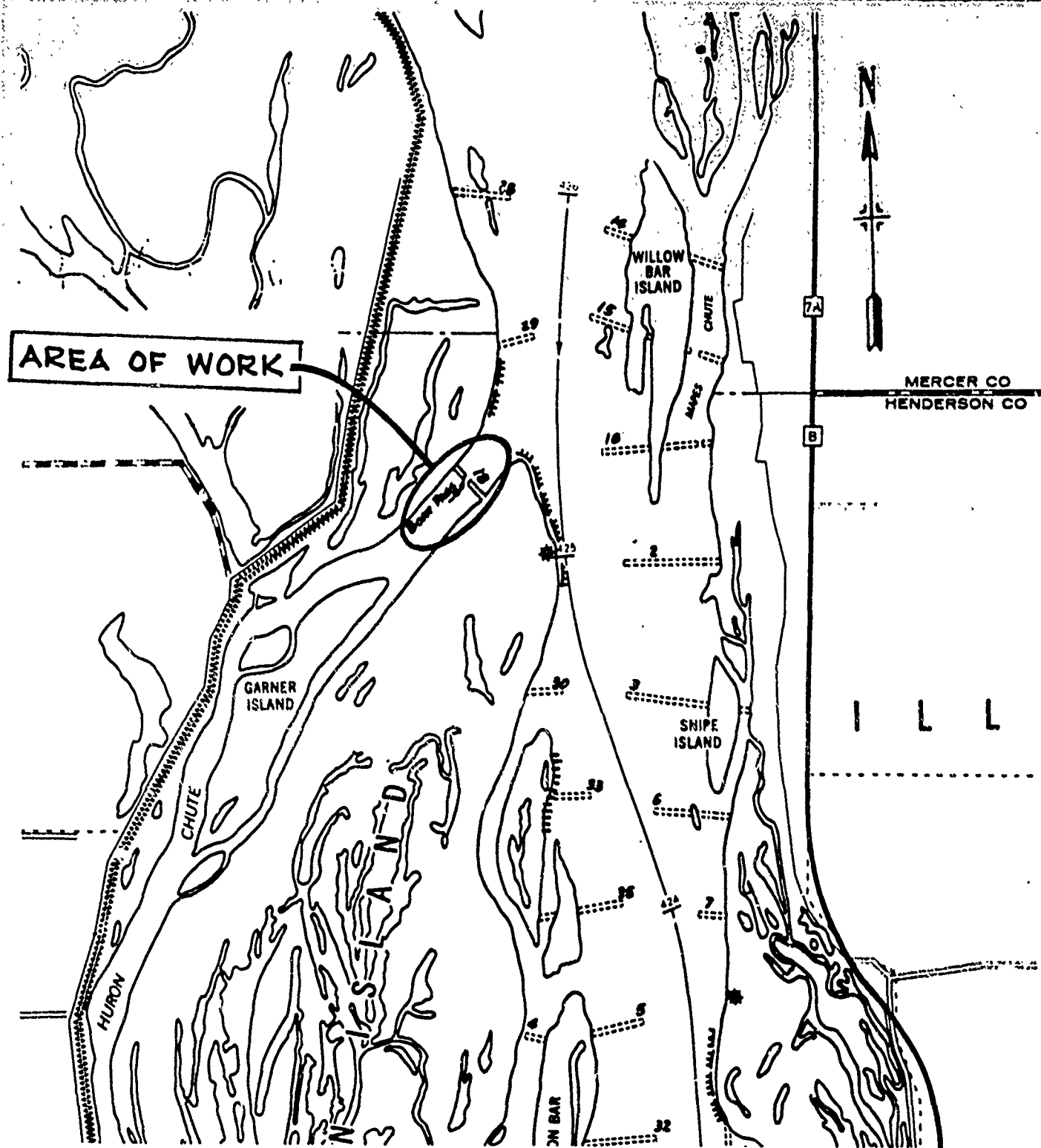
\_\_\_\_\_  
(Date)

John R. Brown  
Colonel, U.S. Army  
District Engineer

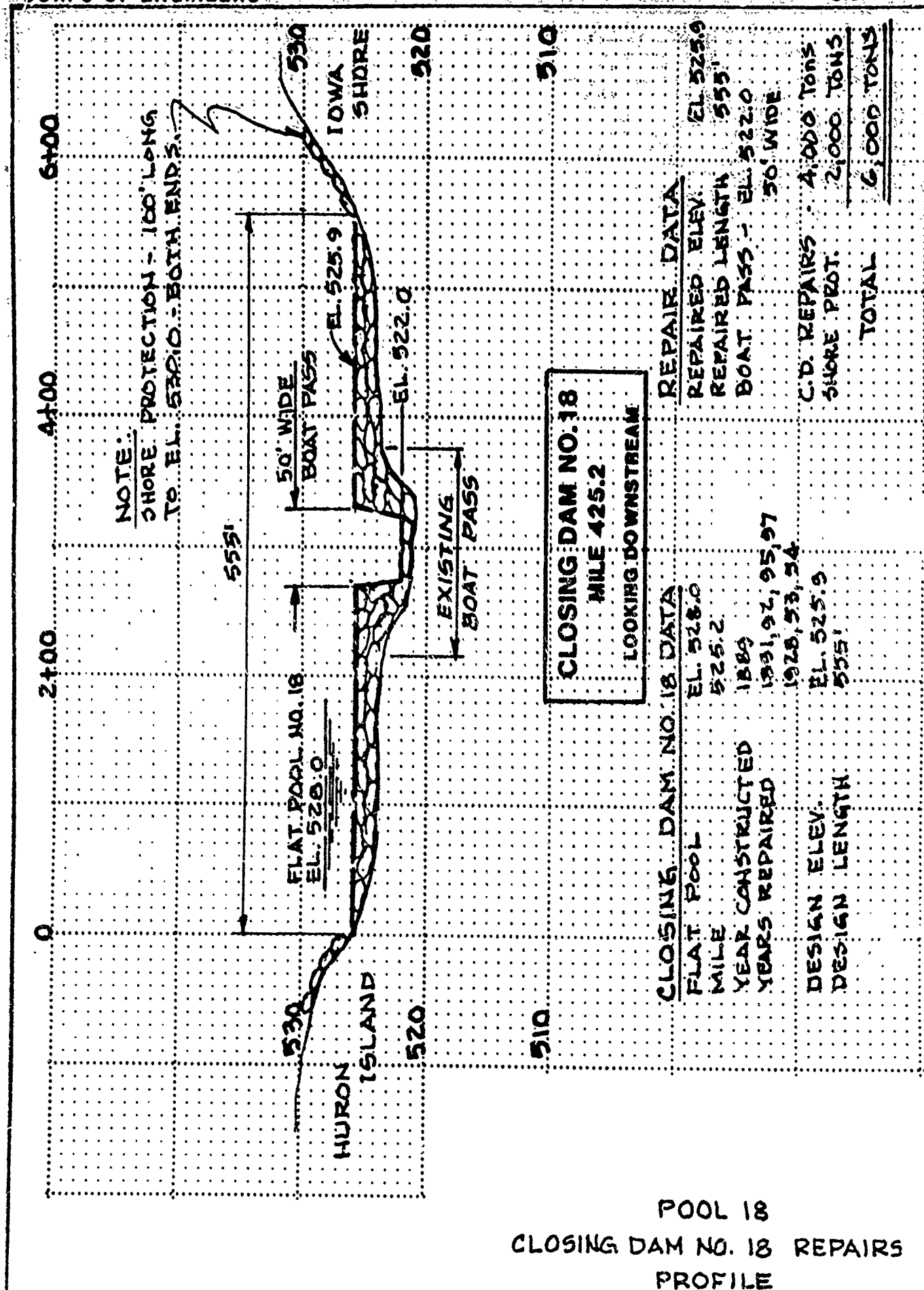


LOCK AND DAM NO. 16  
HOG ISLAND BANK PROTECTION  
VICINITY MAP





POOL 18  
CLOSING DAM NO. 18 REPAIRS  
VICINITY MAP



**SECTION 404(b)(1) EVALUATION**





US Army Corps  
of Engineers  
Rock Island District

# Section 404 (b)(1) Evaluation (40 CFR 230)

Section 31 Town T17N Range R5W Waterway MR Application Number 188750  
Section 3 Township T72N Range R1W  
City NONE County Rock Island State IL  
City NONE County Muscatine State IA  
City NONE County Des Moines State IA Applicant HSAED, Rock Island  
Activity Bank Protection Lock and Dam #6 Closing Date Prepared 12 June 1990  
Dam Construction at Huron Chute

## 1. Review of Compliance (§230.10(a)-(d))

A review of the permit application indicates that:

- The discharge represents the least environmentally damaging practicable alternative and, if in a special aquatic site, the activity associated with the discharge must have direct access or proximity to, or be located in, the aquatic ecosystem to fulfill its basic purpose (if no, see Section 2 and information gathered for EA alternative);
- The activity does not appear to (1) violate applicable state water quality standards or effluent standards prohibited under Section 307 of CWA; (2) jeopardize the existence of Federally listed endangered or threatened species or their habitat; and (3) violate requirements of any Federally designated marine sanctuary (if no, see Section 2b and check responses from resource and water quality certifying agencies);
- The activity will not cause or contribute to significant degradation of waters of the United States including adverse effects on human health, life stages of organisms dependent on aquatic ecosystem, ecosystem diversity, productivity and stability, and recreational, aesthetic, and economic values (if no, see Section 2);
- Appropriate and practicable steps have been taken to minimize potential adverse impacts of the discharge on the aquatic ecosystem (if no, see Section 3).

PRELIMINARY 1/ FINAL 2/

|   |                             |                              |                             |
|---|-----------------------------|------------------------------|-----------------------------|
| YES <input checked="" type="checkbox"/> | NO <input type="checkbox"/> | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| YES <input checked="" type="checkbox"/> | NO <input type="checkbox"/> | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| YES <input checked="" type="checkbox"/> | NO <input type="checkbox"/> | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| YES <input checked="" type="checkbox"/> | NO <input type="checkbox"/> | YES <input type="checkbox"/> | NO <input type="checkbox"/> |

## 2. Technical Evaluation Factors (Subparts C-F)

### a. Physical and Chemical Characteristics of the Aquatic Ecosystem (Subpart C)

- Substrate impacts
- Suspended particulates/turbidity impacts
- Water column impacts
- Alteration of current patterns and water circulation
- Alteration of normal water fluctuations/hydroperiod
- Alteration of salinity gradients

| N/A | Not Significant | Significant* |
|-----|-----------------|--------------|
|     | X               |              |
|     | X               |              |
|     | X               |              |
|     | X               |              |
|     | X               |              |
| X   |                 |              |

### b. Biological Characteristics of the Aquatic Ecosystem (Subpart D)

- Effect on threatened/endangered species and their habitat
- Effect on the aquatic food web
- Effect on other wildlife (mammals, birds, reptiles, and amphibians)

|  |   |  |
|--|---|--|
|  | X |  |
|  | X |  |
|  | X |  |

### c. Special Aquatic Sites (Subpart E)

- Sanctuaries and refuges
- Wetlands
- Mud flats
- Vegetated shallows
- Coral reefs
- Riffle and pool complexes

|   |   |  |
|---|---|--|
|   | X |  |
|   | X |  |
|   | X |  |
|   | X |  |
| X |   |  |
|   | X |  |

### d. Use Characteristics (Subpart F)

- Effects on municipal and private water supplies
- Recreational and commercial fisheries impacts
- Effects on water-related recreation
- Aesthetic impacts
- Effects on parks, national and historical monuments, national seashores, wilderness areas, research sites, and similar preserves

|  |   |  |
|--|---|--|
|  | X |  |
|  | X |  |
|  | X |  |
|  | X |  |
|  | X |  |

REMARKS Where a check is placed under the significant category, preparer add explanation on attached sheet.

## 3. Evaluation of Dredged or Fill Material (Subpart G) 3/

- The following information has been considered in evaluating the biological availability of possible contaminants in dredged or fill material. (Check only those appropriate).

- Physical characteristics
- Hydrography in relation to known or anticipated sources of contaminants
- Results from previous testing of the material or similar material in the vicinity of the project
- Known, significant sources of persistent pesticides from land runoff or percolation
- Spill records for petroleum products or designated (Section 311 of CWA) hazardous substances
- Other public records of significant introduction of contaminants from industries, municipalities, or other sources
- Known existence of substantial material deposits of substances which could be released in harmful quantities to the aquatic environment by man-induced discharge activities
- Other sources (specify)

|                                     |
|-------------------------------------|
| <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> |
| <input type="checkbox"/>            |
| <input type="checkbox"/>            |
| <input type="checkbox"/>            |
| <input checked="" type="checkbox"/> |
| <input type="checkbox"/>            |

List appropriate references (see attached sheet).

- An evaluation of the appropriate information in 3a above indicates that there is reason to believe the proposed dredged or fill material is not a carrier of contaminants, or that levels of contaminants are substantively smaller at extraction and disposal sites and not likely to result in degradation of the disposal site. The material meets the testing exclusion criteria.

YES ☒ NO ☐

4. Disposal Site Delineation (§230.11(f))

a. The following factors, as appropriate, have been considered in evaluating the disposal site.

- |  |                                     |
|--|-------------------------------------|
| 1. Depth of water at disposal site .....   | <input checked="" type="checkbox"/> |
| 2. Current velocity, direction, and variability at disposal site .....                                     | <input checked="" type="checkbox"/> |
| 3. Degree of turbulence .....  | <input type="checkbox"/>            |
| 4. Water column stratification .....   | <input type="checkbox"/>            |
| 5. Discharge vessel speed and direction .....  | <input type="checkbox"/>            |
| 6. Rate of discharge .....   | <input type="checkbox"/>            |
| 7. Dredged material characteristics (constituents, amount and type of material, settling velocities) ..... | <input checked="" type="checkbox"/> |
| 8. Number of discharges per unit of time .....   | <input type="checkbox"/>            |
| 9. Other factors affecting rates and patterns of mixing (specify) .....                                    | <input type="checkbox"/>            |

List appropriate references (see attached sheet)

b. An evaluation of the appropriate factors in 4a above indicates that the disposal site and/or size of mixing zone are acceptable .....

YES ☒ NO ☐

5. Actions to Minimize Adverse Effects (Subpart H)

All appropriate and practicable steps have been taken through application of recommendations of §230.70-230.77 to ensure minimal adverse effects of the proposed discharge. List Actions Taken (see attached sheet) .....

YES ☒ NO ☐

N.B. Return to Section 1 for final stage of compliance review. See also note 3/

6. Factual Determinations (§230.11)

A review of the appropriate information as identified in items 2-5 above indicates that there is minimal potential for short-term or long-term environmental effects of the proposed discharge as related to:

- |   |   |                             |
|---|---|-----------------------------|
| a. Physical substrate at the disposal site (review sections 2a, 3, 4, and 5) .....      | YES <input checked="" type="checkbox"/> | NO <input type="checkbox"/> |
| b. Water circulation, fluctuation, and salinity (review sections 2a, 3, 4, and 5) ..... | YES <input checked="" type="checkbox"/> | NO <input type="checkbox"/> |
| c. Suspended particulates/turbidity (review sections 2a, 3, 4, and 5) .....             | YES <input checked="" type="checkbox"/> | NO <input type="checkbox"/> |
| d. Contaminant availability (review sections 2a, 3, and 4) .....                        | YES <input checked="" type="checkbox"/> | NO <input type="checkbox"/> |
| e. Aquatic ecosystem structure and function (review sections 2b and c, 3, and 5) .....  | YES <input checked="" type="checkbox"/> | NO <input type="checkbox"/> |
| f. Disposal site (review sections 2, 4, and 5) .....                                    | YES <input checked="" type="checkbox"/> | NO <input type="checkbox"/> |
| g. Cumulative impact on the aquatic ecosystem .....                                     | YES <input checked="" type="checkbox"/> | NO <input type="checkbox"/> |
| h. Secondary impacts on the aquatic ecosystem .....                                     | YES <input checked="" type="checkbox"/> | NO <input type="checkbox"/> |

7. Evaluation Responsibility

a. This evaluation was prepared by: R. A. CLEVENSTINE  
Position: BIOLOGIST

Date: 12 June 1990

b. This evaluation was reviewed by: MICHAEL A. COCKERILL  
Position: CHIEF, ENVIRONMENTAL ANALYSIS BRANCH

Date: \_\_\_\_\_

8. Findings

- |  |                                     |
|--|-------------------------------------|
| a. The proposed disposal site for discharge of dredged or fill material complies with the Section 404(b)(1) guidelines .....   | <input checked="" type="checkbox"/> |
| b. The proposed disposal site for discharge of dredged or fill material complies with the Section 404(b)(1) guidelines with the inclusion of the following conditions (see attached sheet) ..... | <input type="checkbox"/>            |
| c. The proposed disposal site for discharge of dredged or fill material does not comply with the Section 404(b)(1) guidelines for the following reason(s):                                       |                                     |
| 1. There is a less damaging practicable alternative .....  | <input type="checkbox"/>            |
| 2. The proposed discharge will result in significant degradation of the aquatic ecosystem .....  | <input type="checkbox"/>            |
| 3. The proposed discharge does not include all practicable and appropriate measures to minimize potential harm to the aquatic ecosystem .....  | <input type="checkbox"/>            |

SIGNATURE

Date: \_\_\_\_\_

John R. Brown, Colonel  
U.S. Army District Engineer

\*A negative, significant, or unknown response indicates that the permit application may not be in compliance with the Section 404(b)(1) Guidelines.

1/ Negative responses to three or more of the compliance criteria at this stage indicate that the proposed project may not be evaluated using this "short-form procedure." Care should be used in assessing pertinent portions of the technical information of items 2 and below, before completing the final review of compliance.

2/ Negative response to one of the compliance criteria at this stage indicates that the proposed project does not comply with the guidelines. If the economics of navigation and anchorage of Section 404(b)(2) are to be evaluated in the decision-making process, the "short-form" evaluation process is inappropriate.

3/ If the dredged or fill material cannot be excluded from individual testing, the "short-form" evaluation process is inappropriate.

CENCR-PD-E

Attachment to: Section 404(b)(1) Evaluation (40CFR 230)

5. Actions to Minimize Adverse Effects (Subpart H).


a. Cutting and grading of bank materials is not anticipated. No earthen fill will be used.

b. Riprap material will consist of physically and chemically stable rock and will not significantly contribute to water quality impacts.

c. Riprap will contain large grade rock to contribute interstices for aquatic habitat.

DETERMINATION

Section 404, Subsection (f), Paragraph (b), exempts the discharge of dredged or fill materials for the purpose of maintenance, including emergency reconstruction of recently damaged parts of currently serviceable structures such as dikes, dams, levees, groins, riprap, breakwaters, causeways, and bridge abutments or approaches, and transportation structures from regulation under any or all parts of Section 404 of the Clean Water Act. This involves that portion of the existing closing dam and bank protection that have been damaged by erosion. However, a significant portion of the project involves new construction. Therefore, the balance of the proposed project involving new work is subject to evaluation and regulation under Section 404, Subsection (b), Paragraph (1), and is addressed on the preceding page and above. Benefits realized from the proposed action include stabilization of erodable bank materials, reduction of dredging and disposal requirements, and protection of the integrity of the Nine Foot Channel Navigation Project.



R. A. Clevens  
Biologist, CENCR-PD-E

PERTINENT CORRESPONDENCE



## United States Department of the Interior

Fish and Wildlife Service  
Rock Island Field Office (ES)  
1830 Second Avenue, Second Floor  
Rock Island, Illinois 61201

TAKE  
PRIDE IN  
AMERICA

COM: 309/793-5800  
FTS: 782-5800

In Reply Refer to:

June 20, 1990

Colonel John R. Brown  
District Engineer  
U.S. Army Engineer District  
Rock Island  
Clock Tower Building, P.O. Box 2004  
Rock Island, Illinois 61204-2004

Dear Colonel Brown:

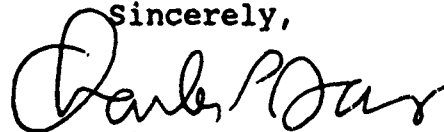
We have reviewed the draft environmental assessment for Hog Island bank protection, Lock and Dam 16, and Huron Chute closing dam modification, Pool 18. The projects propose to armor areas with rock riprap that are subject to erosion.

We concur that there should be no adverse impacts to fish and wildlife resources from project construction. The riprap placement on Hog Island will reduce erosion of that island. Reducing the size of the Huron Chute notch should not adversely affect the chute, and may reduce dredging needs in the nearby channel.

We also concur that there will be no effect from project construction on the endangered species. This precludes the need for further action on this project as required under Section 7 of the Endangered Species Act of 1973, as amended. Should this project be modified or new information indicate endangered species may be affected, consultation should be initiated.

This letter provides comments under the authority of and in accordance with provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.); and the Endangered Species Act of 1973, as amended.

Sincerely,

  
for Richard C. Nelson  
Field Supervisor

cc: IDNR (Aspelmeier)  
IDOC (Sallee)



TERRY E. BRANSTAD, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES

LARRY J. WILSON, DIRECTOR

June 25, 1990  
R. R. 3 Box 434  
Muscatine, Iowa 52761

Bob Clevenstine  
U.S. Army Corps  
CENCR-PD-E  
Clock Tower Bldg.  
Rock Island, Ill. 61204-2004

Reference - Draft E.A. for Huron Chute Closing Dam Modification

Dear Bob:

In our routine sampling of the Mississippi River fishery populations, we have noted that the above mentioned closing structure is valuable flathead catfish (*Pylodictis olivaris*) nursery habitat. My concern is that the proposed project may alter the structure to the point that this habitat will no longer be useable by small flatheads.

Therefore, I recommend that a before and after study be conducted to quantify the change in use of the area as flathead catfish nursery habitat and, if the use is adversely affected, corrective measures be taken.

Sincerely,

  
Bernard Schonhoff  
Mississippi River Biologist

BS/sas

cc: Conover  
Waters  
Millar (USFWS)  
Sallee (Il. DOC)

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AND  
HURON CHUTE CLOSING DAM MODIFICATION -- POOL 18  
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